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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/529,997	03/31/2005	Norbert Cottone	71752	5424

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EXAMINER
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NICHOLSON III, LESLIE AUGUST

ART UNIT	PAPER NUMBER
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3651

DATE MAILED: 05/19/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

<b>Office Action Summary</b>	<b>Application No.</b>	<b>Applicant(s)</b>	
	10/529,997	COTTONE ET,AL.	
	<b>Examiner</b>	<b>Art Unit</b>	
	Leslie A. Nicholson III	3651	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

#### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

#### Status

- 1) ☒ Responsive to communication(s) filed on 22 September 2005.
- 2a) ☐ This action is FINAL. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

#### Disposition of Claims

- 4) ☒ Claim(s) 1-29 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-29 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

#### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 31 March 2005 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

#### Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some \* c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \* See the attached detailed Office action for a list of the certified copies not received.

#### Attachment(s)

- |  |   |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)                        | 4) <input type="checkbox"/> Interview Summary (PTO-413)                     |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)               | Paper No(s)/Mail Date. _____  |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| Paper No(s)/Mail Date <u>3/31/05, 5/17/05</u>  | 6) <input type="checkbox"/> Other: _____                                    |

## DETAILED ACTION

### *Drawings*

1. The drawings are objected to as failing to comply with 37 CFR 1.84(p)(5) because they do not include the following reference sign(s) mentioned in the description: 25. Corrected drawing sheets in compliance with 37 CFR 1.121(d) are required in reply to the Office action to avoid abandonment of the application. Any amended replacement drawing sheet should include all of the figures appearing on the immediate prior version of the sheet, even if only one figure is being amended. Each drawing sheet submitted after the filing date of an application must be labeled in the top margin as either "Replacement Sheet" or "New Sheet" pursuant to 37 CFR 1.121(d). If the changes are not accepted by the examiner, the applicant will be notified and informed of any required corrective action in the next Office action. The objection to the drawings will not be held in abeyance.

### *Specification*

2. The specification is objected to because it refers to claim 20 as a method claim (P4), however, it is an apparatus claim.

The separating unit is assigned reference numerals 24 and 25 in the same paragraph (P17).

Appropriate correction is required.

***Claim Objections***

3. Claims 1-20 are objected to because, as provided in 37 CFR 1.75(i), each element or step of the claim should be separated by a line indentation.

Claim 20 objected to under 37 CFR 1.75(c), as being of improper dependent form for failing to further limit the subject matter of a previous claim. Applicant is required to cancel the claim(s), or amend the claim(s) to place the claim(s) in proper dependent form, or rewrite the claim(s) in independent form. Piece goods have not been positively claimed as an element of the installation, but as the elements that are conveyed and transferred.

***Claim Rejections - 35 USC § 112***

3. The following is a quotation of the first paragraph of 35 U.S.C. 112:

The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.

4. Claims 1-29 are rejected under 35 U.S.C. 112, first paragraph, as failing to comply with the enablement requirement. The claim(s) contains subject matter which was not described in the specification in such a way as to enable one skilled in the art to which it pertains, or with which it is most nearly connected, to make and/or use the invention.

Referring to claims 1-20, it is unclear what the means are for shaping piece goods. Are the shapes of the piece goods actually changed?

Claim 21 recites the use of a separating unit to separate the piece goods from the loading means into the loading space. It is unclear from the drawings and specification how this is done.

5. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

6. Claims 1-29 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

The claims are generally narrative and indefinite, failing to conform with current U.S. practice. They appear to be a literal translation into English from a foreign document and are replete with grammatical and idiomatic errors. Below are at least some of these errors.

Claim 4 recites the limitation "the complete loading space" in line 2 of the claim. There is insufficient antecedent basis for this limitation in the claim.

Claim 9 recites the limitation "a transfer device" in line 2 of the claim. Is this the same transfer device of claim 1, or a different transfer device? Furthermore,

Claim 10 recites "...if the piece goods are to be reoriented...". Is this a condition to an operation of the apparatus? This is not structurally limiting to the apparatus. Furthermore, the claim recites the limitation "the accumulating conveyor" in lines 3-4 of the claim. There is insufficient antecedent basis for this limitation in the claim.

Claim 11 uses the word "empty", however it appears as though the intended word should be "emptying". Is this the case?

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Claim 13 recites the loading means having the U-shaped longitudinal profile, however claim 12 recites the loading means constructed either in a U-shaped longitudinal profile... or in plate form. Claim 12 must claim a decisive structure, not one or the other.

Claims 17 and 18 recite the limitation "the vertically adjustable conveyor" in line 2 of the claims. There is insufficient antecedent basis for this limitation in the claim.

Claim 21 recites the limitation "the feed unit" in line 5 of the claim. There is insufficient antecedent basis for this limitation in the claim.

Regarding claims 23 and 24, the word "preferably" renders the claim indefinite because it is unclear whether the limitation(s) following the phrase are part of the claimed invention. See MPEP § 2173.05(d).

Claim 24 recites a different use of the shaping means than that of claim 23 and 21. Does the claim intend to mean that the piece goods then compressed in the loading means (14)?

### ***Claim Rejections - 35 USC § 102***

7. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

8. Claims 1,2,3,4,5,12 are rejected under 35 U.S.C. 102(b) as being anticipated by Smith USP 3,904,024.

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Smith discloses a similar installation comprising:

- a feed device (136) on which the piece goods can be singly fed;
- a transfer device (20) to which the piece goods can be transferred from the feed device and by means of which the piece goods can be brought into the interior of the loading space;
- at least one shaping means (32) through which the piece goods can be brought into a predeterminable shape or orientation,
- wherein the transfer device transfers the piece goods, whilst maintaining a shape of the piece goods given by the shaping means, individually or groupwise with the aid of an, in each case, horizontally movable loading means (34) into the interior of the loading space (22,24) which is open on at least one side (fig.1)
- wherein a separating unit (46) is provided which separates the piece goods from the loading means, accompanied by the retraction thereof, and deposits said piece goods in the loading space
- wherein the loading means are constructed as shaping means
- wherein the transfer device provides a vertically adjustable conveyor (fig.3)  
(C3/L1-28)
- wherein the complete loading space is located on a lifting table (30)
- wherein the loading means are constructed in the form of a U-shaped longitudinal profile with at least one open front side or in plate form (at least fig.1)

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9. Claims 1,2,4,5,6,7,8,9,11,12,13,14,15,16,17,18,20 are rejected under 35

U.S.C. 102(b) as being anticipated by Proulx USP 4,892,458.

Proulx discloses a similar installation comprising:

- a feed device (11) on which the piece goods can be singly fed;
- a transfer device (13) to which the piece goods can be transferred from the feed device and by means of which the piece goods can be brought into the interior of the loading space;
- at least one shaping means (10) through which the piece goods can be brought into a predeterminable shape or orientation,
- wherein the transfer device transfers the piece goods, whilst maintaining a shape of the piece goods given by the shaping means, individually or groupwise with the aid of an, in each case, horizontally movable loading means (35) into the interior of the loading space (38) which is open on at least one side
- wherein a separating unit (60',90,91) is provided which separates the piece goods from the loading means, accompanied by the retraction thereof, and deposits said piece goods in the loading space (C4/L18-39, C5/L4-21)
- wherein the separating unit is connected to the conveyor and has holding means
- wherein the loading means are constructed as shaping means
- wherein the complete loading space is located on a lifting table (38) (C3/L44-52)
- wherein the transfer device provides a loading unit, which is directly juxtaposed with a vertically adjustable conveyor (38,39) (C3/L44-52) and provides at least two vertically superimposed working planes (35,35') and wherein a set of the



working planes in each case has a cyclically operable conveyor system for loading or unloading the working planes with loading means (gap between 35,35')

- wherein the feed device is constructed at least zonally as a motor-driven linear conveyor (16) and has an end section constructed as an accumulating conveyor (fig.1)
- wherein the accumulating conveyor has a stop face (22') oriented transversely to the conveying direction of the feed device
- wherein the accumulating conveyor provides a sliding or rolling plane (26) which is flush or lowered with respect to the bearing surface of the linear conveyor (fig.1)
- wherein the loading means are arranged in parallel, juxtaposed manner in the conveying direction, wherein the total width of all the juxtaposed loading means is the same or slightly smaller than the loading space width (fig.5) and wherein in each case the length of the loading means is slightly smaller than the length of the loading space (fig.1)
- wherein a transfer device is provided (22)
- wherein the transfer device has a forklike construction (25,28) and bilaterally at least partly encloses the piece goods on the accumulating conveyor (C3/L18-21)
- wherein there is a making ready unit (25)
- wherein the loading means are constructed in the form of a U-shaped longitudinal profile with at least one open front side or in plate form (fig.1,6)

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- wherein the U-shaped longitudinal profile has two spaced longitudinal profile arms with a clearly defined mutual spacing (fig.1,6)
- wherein the conveyor has at least one sensor system and wherein a control unit is provided (C4/L29-39)

10. Claims 21,22,23, and 25 (see ¶14) are rejected under 35 U.S.C. 102(b) as being anticipated by Tommasi USP 5,459,979.

Tommasi discloses a similar method for loading a loading space with piece goods comprising:

- feeding in the piece goods (1) in an area located outside the loading space (fig.1)
- shaping the piece goods in either individual or grouped form (abstract)
- transferring the piece goods to the transfer unit and horizontally introducing the piece goods into the loading space (inherent, if not disclosed) (fig.2), whilst maintaining the shape of the piece goods by means of at least one loading means (40)
- depositing the piece goods within the loading space by separating the piece goods from the loading means using a separating unit (2)
- wherein the shaping of the piece goods takes place by means of a handling device (10) directly through depositing in the shaping means (4), so that the piece goods are compressed at least pairwise in the conveying direction of the feed unit (fig.1)

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- wherein the piece goods are shoved together along a piece good row and in this shoved together state are transferred into a shaping means (4), where the piece goods are compressed along at least one axis oriented perpendicular to the extension of the piece good row (fig.1)
- wherein the piece goods are brought into shaping means (4), where the piece goods are shaped and the shaping means are used as loading means with which the piece goods are brought into the loading space

***Claim Rejections - 35 USC § 103***

11. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

12. Claim 19 is rejected under 35 U.S.C. 103(a) as being unpatentable over Proulx USP 4,892,458 in view of Mastak USP 5,074,744.

Proulx discloses all the limitations of the claim (see ¶19), but does not expressly disclose the separating unit constructed like a rake.

Mastak teaches the separating unit (116) constructed like a rake (fig.2) for the purpose of forming groups among conveyed items (C4/L3-16).

At the time of invention it would have been obvious to one having ordinary skill in the art to have the separating unit constructed like a rake, as taught by Mastak, in the device of Proulx, for the purpose of forming groups among conveyed items.

13. Claims 26 and 27 are rejected under 35 U.S.C. 103(a) as being unpatentable over Tommasi USP 5,459,979 in view of Kennison USP 4,264,253.

Tommasi discloses all the limitations of the claim (see ¶9), but does not expressly disclose the method wherein a plurality of parallel, juxtaposed piece good-filled loading means are provided in such a way that their total loading means width corresponds to the loading space width and in each case the length of the individual loading means corresponds to the length of the loading space and the plurality of loading means is introduced horizontally into the loading space until the entire loading means can be positioned within said loading space, wherein prior to the introduction of the plurality of loading means, there is a vertical orientation of said loading means with respect to a deposition surface located within the loading space.

Kennison teaches a plurality of parallel, juxtaposed piece good-filled loading means are provided in such a way that their total loading means (121d) (fig.8-11) width corresponds to the loading space (116) width and in each case the length of the individual loading means corresponds to the length of the loading space and the plurality of loading means is introduced horizontally into the loading space until the entire loading means can be positioned within said loading space, wherein prior to the introduction of the plurality of loading means, there is a vertical orientation of said loading means with respect to a deposition surface located within the loading space (abstract) (fig.1,2) for the purpose of forming a stack of piece goods equal to the size of the loading space.

At the time of invention it would have been obvious to one having ordinary skill in the art to have a plurality of parallel, juxtaposed piece good-filled loading means provided in such a way that their total loading means width corresponds to the loading space width and in each case the length of the individual loading means corresponds to the length of the loading space and the plurality of loading means is introduced horizontally into the loading space until the entire loading means can be positioned within said loading space, wherein prior to the introduction of the plurality of loading means, there is a vertical orientation of said loading means with respect to a deposition surface located within the loading space, as taught by Kennison, in the device of Tommasi, for the purpose of forming a stack of piece goods equal to the size of the loading space.

#### ***Examiner's Note***

14. The applicant appears to be attempting to use means plus function in claim 1-20. Does the applicant intend to invoke 35 USC 112 6<sup>th</sup> paragraph? The examiner has construed this claim as to not invoking 35 USC 112 6<sup>th</sup> paragraph. See MPEP 2114 and 2181.

The recitation in the preamble of claim 21 relates only to a possible or intended use of the device being claimed, but does not further structurally limit the device.

#### ***Conclusion***

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16. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

17. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Leslie A. Nicholson III whose telephone number is 571-272-5487. The examiner can normally be reached on M-F, 8:30 AM - 5 PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Gene Crawford can be reached on 571-272-6911. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

L.N.  
5/9/2006

  
GENEO. CRAWFORD  
SUPERVISORY PATENT EXAMINER